

REMARKS / DISCUSSION OF ISSUES

Claims 1-13 are pending in the application. Claims 1-13 are rejected.

Claim 1 is rejected under 35 USC 103(a) over Olympus in view of newly cited Taylor et al. (US 5,299,043)(herein 'Taylor'). Applicant respectfully traverses this rejection.

The Examiner acknowledges that Olympus fails to show an optically transparent cover sheet sealed to the substrate, forming a sealed enclosure surrounding the polarizing element. Taylor is cited to show such features.

Taylor shows an underwater LCD apparatus having a liquid crystal device (10) and a printed circuit board (92) sandwiched together and sealed in a water-tight transparent enclosure (84, 86). The liquid crystal device (10) includes a liquid crystal cell (20) and matting (50) surrounding the cell (20).

Looking at Fig. 2 of Taylor, it can be seen that the front surface of liquid crystal cell (20) includes polarizer (30) positioned on an optically transparent substrate in the form of glass plate (22). This front surface is adjacent to transparent cover sheet (86). However, neither cover sheet (86) nor any part of the remainder of the enclosure (84) is in contact with glass plate (22).

Another polarizer (36) is located on another glass plate (24). However, neither cover sheet (86) nor any part of the remainder of the enclosure (84) is in contact with glass plate (24).

Contrary to the apparatus of Taylor, applicant's claim 1 calls for the cover sheet to be sealed to the optically transparent substrate. Moreover, applicant's claim 1 calls for the enclosure to have a filling of a non-reactive atmosphere.

There is no teaching or suggestion in either Olympus or Taylor to have a cover sheet sealed to the substrate of a polarizer, nor to have the resultant sealed enclosure filled with a non-reactive atmosphere.

Accordingly, it is urged that the rejection is in error and should be withdrawn.

Claim 2 is rejected under 35 USC 103(a) as being unpatentable over Olympus in view of Taylor and further in view of Shimizu.

The combination of Olympus and Taylor is said to disclose the invention, except for the feature that the polarizer is a wire grid polarizer, and Shimizu is said to teach the substitution of a wire grid polarizer for a conventional polarizer.

Shimizu shows a digital image projector with polarizing beam splitters. In the embodiment shown in Figs. 4 - 6, the polarizer is a wire grid polarizer. Shimizu states that there are certain problems with conventional digital image projectors employing reflective polarization modulators and conventional MacNeille-type polarizing beam splitters which employ multilayer dielectric polarizing film, which can be avoided by employing a wire grid polarizing beam splitter. See col. 12, lines 25-30.

Shimizu does not explain what the problems are, but it is clear that they are specific to digital image projectors. The skilled artisan would therefore have no motivation to substitute a wire grid polarizer for the film polarizer of Olympus. Such motivation is required for an effective combination rejection under Section 103.

Accordingly, the rejection of claim 2 is in error, and should be withdrawn.

Claim 3 is rejected under 35 USC 103(a) over Olympus. Applicant respectfully traverses this rejection.

While it has been acknowledged by the Examiner that the reference fails to teach any sealant between the substrate and the cover sheet, it is nevertheless urged that the use of such a sealant would be obvious in view of the teaching of an air-tight enclosure.

However, it is not the use of sealant per se which is urged to be patentable, but rather the use of sealant to seal the cover sheet to the substrate. This results in the isolation of the polarizing element from other elements which may be present in an assembly, a result which is clearly neither taught nor suggested by Olympus.

Accordingly, it is urged that the rejection of claim 3 is in error and should be withdrawn.

Claim 4 is rejected under 35 USC 103(a) as being unpatentable over Olympus

in view of Shimizu.

This rejection is in error for the same reasons advanced with respect to the rejection of claim 2, and accordingly should be withdrawn.

Claim 5–7 are rejected under 35 USC 103(a) over Kizawa. Applicant respectfully traverses this rejection.

Kizawa teaches an enclosure for monitor cameras. The enclosure (2) is composed of triangular walls fitted together to form the appearance of 'sharp design' (7, 8, 9). The monitor cameras are formed into a 'photographing device block' (3) which is provided **inside** the enclosure (2), to photograph images through a window (2f) in one of the walls. See, e.g., Fig. 2(c).

Kizawa fails to teach or suggest an enclosure with triangular top and bottom portions for form a wedge-shaped enclosure, as well as face portions having mounting apertures for optical elements, as called for by claim 5. Moreover, Kizawa does not teach or suggest such a structure in which the face portions have a rectangular shape, as called for by claim 6.

The Examiner has acknowledged that the reference fails to disclose such features, but has urged that absent a showing of criticality, such would have been a matter of design choice and therefore obvious.

However, the test for patentability under Section 103 is whether the claimed invention would have been obvious to the skilled artisan in view of the teachings of the cited reference. In this instance, Kizawa contains nothing which would teach or suggest a wedge-shaped enclosure with triangular top and bottom portions and rectangular face portions, and apertures for optical elements in the face portions. In fact, in teaching that all of the faces of his enclosure are triangular, and that only one of these faces has a window, Kizawa actually teaches away from Applicant's claimed invention.

It is only with the aid of hindsight from Applicant's own teachings that the claimed invention becomes obvious, and such hindsight is not permitted in judging patentability under Section 103.

Accordingly, the rejection is in error and should be withdrawn.

Claims 8-10, 12 and 13 are rejected under 35 USC 103(a) over Dreyer.

Dreyer discloses a projector with a multiple lamp light source. In Fig. 9, Dreyer shows one embodiment of a projector in which various elements including a 'polarization modulating display 32, such as a liquid crystal display', are enclosed within a housing, and in which a projection lens 23 is apparently mounted in an aperture of the housing.

Dreyer does not disclose a sub-assembly for a display device comprising a sealable housing having first, second and third mounting apertures, a light polarizing element having an environmentally sensitive active surface, the light polarizing element sealed into the first aperture, a light modulator panel sealed into the second aperture and a lens sealed into the third aperture.

The Examiner has acknowledged the deficiencies of the reference, except for the fact that the reference fails to disclose a polarizing element with an environmentally sensitive surface, but has urged that absent a showing of criticality, all such deficiencies would have been obvious.

However, as noted above with respect to the rejection of claims 5-7, the test for patentability under Section 103 is whether the claimed invention would have been obvious to the skilled artisan in view of the teachings of the cited reference. In this instance, Dreyer contains nothing which would teach or suggest a sub-assembly for a display device comprising a sealable housing having first, second and third mounting apertures, a light polarizing element having an environmentally sensitive active surface, the light polarizing element sealed into the first aperture, a light modulator panel sealed into the second aperture and a lens sealed into the third aperture.

It is only with the aid of hindsight from Applicant's own teachings that the claimed invention becomes obvious, and such hindsight is not permitted in judging patentability under Section 103.

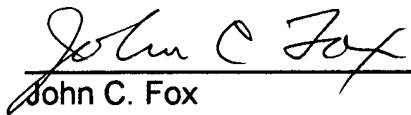
Accordingly, the rejection is in error and should be withdrawn.

Claim 11 is rejected under 35 USC 103(a) over Dreyer in view of Shimizu. Applicant respectfully traverses this rejection. This rejection is in error for at least the

same reasons advanced with respect to the rejection of claims 2 and 4, and accordingly should be withdrawn.

In view of the foregoing, applicant respectfully requests that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application to be in condition for allowance.

Respectfully submitted,



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